

What is claimed is

1. A method of treating or inhibiting atherogenesis in a subject, the method comprising administering to the subject an immunogenic amount of a phosphorylcholine (PC)-enriched preparation derived from a component of a cell wall polysaccharide of a pathogen, wherein the administration results in the production of antibodies that bind to oxidized low density lipoprotein (OxLDL).
2. The method of claim 1, wherein the phosphorylcholine (PC)-enriched preparation is administered in combination with an immunostimulant adjuvant.
3. The method of claim 1, wherein the pathogen is streptococcus.
4. The method of claim 3, wherein the streptococcus is *S. pneumoniae*.
5. The method of claim 1, wherein the cell wall component of a polysaccharide is lipotechoic acid.
6. A method of treating or inhibiting atherogenesis and pneumococcal infection in a subject, the method comprising administering to the subject an immunogenic amount of a phosphorylcholine (PC)-enriched preparation, wherein the administration results in the production of antibodies that bind to oxidized low density lipoprotein (OxLDL) associated with atherogenesis and to phosphorylcholine moieties

associated with a cell wall polysaccharide of a pathogen.

7. A method for ameliorating atherosclerosis in a subject, the method comprising administering to the subject a phosphorylcholine (PC)-enriched preparation, in a pharmaceutically acceptable carrier, wherein the phosphorylcholine (PC)-enriched preparation is derived from OxLDL or phosphorylcholine associated with the cell wall of *S. pneumoniae*.

8. The method of claim 7, wherein the phosphorylcholine (PC)-enriched preparation is administered in combination with an immunostimulant adjuvant.

9. A method for ameliorating atherosclerosis in a subject, the method comprising administering to the subject antibodies that bind to oxidized low density lipoprotein (OxLDL), in a pharmaceutically acceptable carrier, wherein the antibodies result from an immunogenic response to lipoteichoic acid components of a cell wall polysaccharide of a pathogen.

10. The method of claim 9, wherein the antibody is monoclonal or polyclonal.

11. The method of claim 9, wherein the pathogen is streptococcus.

12. The method of claim 11, wherein the streptococcus is *S. pneumoniae*.

13. A method of ameliorating disease caused by

atherogenesis in a subject, the method comprising:

inducing an immune response in the subject with phosphorylcholine (PC)-enriched preparation, wherein the subject generates antibodies that bind to phosphorylcholine associated with OxLDL, and wherein said antibodies prevent the uptake of low density lipoproteins by macrophages, thereby ameliorating disease caused by atherogenesis.

14. The method of claim 13, wherein the subject is human.

15. An anti-atherogenesis or anti-pneumococcal vaccine comprising an immunogenic amount of a phosphorylcholine (PC)-enriched preparation derived from a component of a cell wall polysaccharide of a pathogen, wherein the administration results in the production of antibodies that bind to PC associated with OxLDL, and a physiologically acceptable vaccine vehicle.

16. The vaccine of claim 15, wherein said vehicle comprises an effective amount of an immunostimulant adjuvant.

17. The vaccine of claim 15, wherein the pathogen is Streptococcus.

18. An article of manufacture comprising packaging material and, contained within the packaging material, a pharmaceutical composition comprising an immunogenic amount of a phosphorylcholine (PC)-enriched preparation, wherein the packaging material comprises a label or package insert indicating that said composition modulates atherogenesis.

19. The article of claim 18, wherein the composition

modulates atherogenesis by generating antibodies specific for low density lipoprotein.

20. The article of claim 19, wherein the low density lipoprotein is oxidized low density lipoprotein.

21. The article of claim 7, wherein the phosphorylcholine (PC)-enriched preparation is derived from pneumococcus.

22. An article of manufacture comprising packaging material and, contained within the packaging material, a composition comprising an antibody that binds to phosphorylcholine (PC) associated with OxLDL, wherein the packaging material comprises a label or package insert indicating that said antibody can be used for treating atherosclerosis in a subject.

23. The article of claim 22, wherein the antibody is generated from a phosphorylcholine (PC)-enriched preparation derived from *S. pneumoniae*.

24. An article of manufacture comprising packaging material and, contained within the packaging material, a vaccine that confers immunity to *S. pneumoniae*, wherein the packaging material comprises a label or package insert indicating that said vaccine modulates the activity of OxLDL and can be used for treating or preventing atherogenesis in a subject.

25. An article of manufacture comprising packaging material and, contained within the packaging material, an antibody that preferentially binds to *S. pneumoniae*,

wherein the packaging material comprises a label or package insert indicating that said antibody can be used for treating a subject having an arteriosclerosis-associated disorder.

26. A method for treating or inhibiting atherogenesis in a subject, the method comprising administering to the subject an immunogenic amount of a phosphorylcholine-enriched preparation, wherein the administration results in the production of antibodies that bind to a phosphorylcholine-associated epitope present in oxidized low density lipoprotein (OxLDL).

27. The method of claim 26, wherein the phosphorylcholine-enriched preparation is derived from a phospholipid.

28. The method of claim 27, wherein the phospholipid is selected from the group consisting of oxidized forms of 1-palmitoyl-2-arachidonoyl-sn-glycero-3-phosphorylcholine (Ox-PAPC), 1-palmitoyl-2-oxoalderoyl-sn-glycero-3-phosphorylcholine (POVPC), 1-palmitoyl-2-glutaroyl-sn-glycero-3-phosphorylcholine (PGPC), 1-palmitoyl-2-epoxyisopropane-sn-glycero-3-phosphorylcholine (PEIPC), oxidized 1-stearoyl-2-arachidonoyl-sn-glycero-3-phosphorylcholine (Ox-SAPC), 1-stearoyl-2-oxoalderoyl-sn-glycero-3-phosphorylcholine (SOVPC), 1-stearoyl-2-glutaroyl-sn-glycero-3-phosphorylcholine (SGPC), 1-stearoyl-2-epoxyisopropane-sn-glycero-3-phosphorylcholine (SEIPC), 1-stearoyl-2-arachidonoyl-sn-glycero-3-phosphorylethanolamine (Ox-SAPE), 1-stearoyl-2-oxoalderoyl-sn-glycero-3-phosphorylethanolamine (SOVPE), 1-stearoyl-2-glutaroyl-sn-glycero-3-phosphorylethanolamine (SGPE), and 1-

stearoyl-2-epoxyisopropane-sn-glycero-3-phosphorylethanolamine (SEIPE).

29. The method of claim 27, wherein the phospholipid is derived from a cell wall of a pathogen.

30. The method of claim 29, wherein the pathogen is derived from the genus streptococcus.

31. The method of claim 30, wherein the streptococcus is *S. pneumoniae*.

32. The method of claim 29, wherein the cell wall component of a polysaccharide is lipotechoic acid.